

**Subject:** ETS MPS/PM-1 (Aqua) Engineering Release 6.1 Delivery Letter  
**Date:** Fri, 17 Nov 2000 12:26:48 -0500  
**From:** enoone@csc.com  
**To:** wfuller@pop500.gsfc.nasa.gov

Willie,

We are pleased to deliver Release 6.1 of the ETS Multimode Portable Simulator for PM-1 (MPS/Aqua). This engineering release delivery provides resolutions to Discrepancy Reports (DRs) SMODr08087, SMODr08088, and SMODr08344, and Change Request (CR) SMODr08339, as all detailed in the ESDIS DR Tracking Tool (DRTT).

There are three attachments to this letter. The first attachment contains the DR/CR descriptions, the list of source files updated, and installation instructions. The second attachment contains an updated release history summary matrix. The third attachment contains an updated Mission Systems Configuration Management (MSCM) form.

The updated software executable modules are being delivered on CD-ROM. Two copies of the CD are being given to Guy Cordier, who will forward one copy to Raytheon at Denver and will use the other for installation on the MPS/PM-1 simulator PCs in the Bldg 32 EOS ISR and LSR at GSFC. The updated software is also being installed on one of the serial card-equipped PCs in the Bldg 25 Simulations Operations Center and on the portable PCs, in the event that any of those units are needed to support upcoming Aqua data flows.

(See attached file: AttachA.doc)(See attached file: AttachB.doc)(See attached file: AttachC.doc)

If you have any questions about this latest delivery, please do not hesitate to contact me.

Estelle

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Attachments:

[Attachment A]

[Attachment B]

[Attachment C]

## **Attachment A - Release 6.1 Delivery Contents and Installation Instructions**

The changes made to the MPS/Aqua software since the delivery of Release 6.0 are in response to the Discrepancy Reports (DRs) described in the following table.

DR Number		Severity	DR Short Description	Comment
SMOdr08087	ETS0409	2	Dump packets are not transmitted in serial mode.	
SMOdr08088	ETS0410	2	Secondary header flag not set in memory dump packets.	
SMOdr08339	ETS0421	3	Allow 0 in all sample rates and slot numbers for an APID.	This is a Change Request.
SMOdr08344	ETS0422	3	Unable to change VCDU header fields when in serial mode.	

The changed source files are:

Executable Module	Files
SCPM1.dll	TlmVirtualChannel.h & .cpp, TlmVCDUHeader.cpp, TlmVCDU.h & .cpp, TlmDumpPacket.cpp, TlmDumper.cpp, and TlmMain.cpp
gen_interval.sql	<i>This is the script change to enable ingest of packet definitions in the PDB that contain zeros or nulls for all packet transmission rate fields.</i>

### **Installation Instructions**

The changed source code has been compiled and linked into the SCPM1 executable dll file, named in the preceding table. Copy the new executable module into the *c:\Program Files\csc\PM1 Server 6.0* folder, replacing the existing file of the same name.

The gen\_interval.sql SQL script should be copied to the *d:\pm1\_db\scripts* folder, replacing the file of the same name.

The next page of this attachment constitutes an addendum to the System User's Guide for the SIMSS/PM-1 Simulator. It replaces paragraph SCPM1-4.1.5 on Page 24 of that document.

### SCPM1-4.1.5 Telemetry VCDU Container Items

For the transmission of serial mode telemetry, certain VCDU Primary Header field values are defined in container items so that they may be easily changed. These are listed in the following table. All PM-1 telemetry is normally transmitted on virtual channel 2. Modification of the Fill VCDU (Virtual Channel 63) is not possible. To set the replay flag, for example, enter the directive 'set vcdureplay 1'.

Name	Type	Size	Description
vcd�2version	Fixed	2 bits	Version Number
vcd�2scid	Fixed	8 bits	Spacecraft ID
vcd�2vcid	Fixed	6 bits	Virtual Channel ID
vcd�2replay	Fixed	1 bit	Replay Flag
vcd�2reserved	Fixed	7 bits	Reserved Flags

It is also possible to inject data values into VCDU headers that will appear as intermittent errors in the data stream. There are 50 internal buffers where VCDUs are constructed. To inject an error that will appear once in every 50 VCDUs, enter a set directive using one of the following container names as the argument. Where “<buffer>” appears in the following table, substitute a buffer number between zero and 49. For example, the container item for buffer 11’s Primary Header Version field is named “VCDUVERSION11”.

Name	Type	Size	Description
VCDUVERSION<buffer>	Fixed	2 bits	Version Number
VCDUSCID<buffer>	Fixed	8 bits	Spacecraft ID
VCDUVCID<buffer>	Fixed	6 bits	Virtual Channel ID
VCDUREPLAY<buffer>	Fixed	1 bit	Replay Flag
VCDURESERVED<buffer>	Fixed	7 bits	Reserved Flags

### **Attachment B - Release History Summary Matrix**

Attached is the release history summary matrix, which reflects the MPS/PM-1 Release 6.1 delivery.

## Release History Summary Matrix

**System:**        **MPS/Aqua**

Release Number		1.0	1.1	2.0	2.1	2.2	3.0	3.1	4.0	5.0	5.1	6.0 Beta	6.0 Beta Update 1
Delivery Date		7/30/99	9/2/99	9/24/99	10/25/99	11/18/99	12/17/99	1/21/00	3/17/00	5/12/00	6/22/00	7/28/00	9/14/00
Configuration Item	CI No.												
Core (Client)	1.1	1.0	1.0	2.0	2.0	2.0	3.0	1.0	1.0	1.1	1.1	2.0	2.0
Core (Server)	1.2	1.0	1.0	2.0	2.0	2.0	3.0	1.0	1.0	1.1	1.1	2.0	2.0
SC-PM1 (Client)	1.3	1.0	1.1	2.0	2.1	2.2	3.0	3.1	4.0	5.0	5.0	6.0	6.0
SC-PM1 (Server)	1.4	1.0	1.1	2.0	2.1	2.2	3.0	3.1	4.0	5.0	5.1	6.0	6.0
GS (Client)	1.5	1.0	1.1	2.0	2.1	2.2	3.0	3.1	4.0	5.0	5.0	6.0	6.0
GS (Server)	1.6	1.0	1.1	2.0	2.1	2.2	3.0	3.1	4.0	5.0	5.0	6.0	6.0
IP Input (Client)	1.7	1.0	1.0	2.0	2.0	2.0	3.0	1.0	1.0	1.1	1.1	2.0	2.0
IP Input (Server)	1.8	1.0	1.0	2.0	2.0	2.0	3.0	1.0	1.0	1.1	1.1	2.0	2.0
IP Output (Client)	1.9	1.0	1.0	2.0	2.0	2.0	3.0	1.0	1.0	1.1	1.1	2.0	2.0
IP Output (Server)	2.0	1.0	1.0	2.0	2.0	2.0	3.0	1.0	1.0	1.1	1.1	2.0	2.0
DQM (Client) <sup>1</sup>	2.1												
DQM (Server) <sup>1</sup>	2.2												
Logging (Client)	2.3	1.0	1.0	2.0	2.0	2.0	3.0	1.0	1.0	1.1	1.1	2.0	2.0

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<sup>1</sup> To be delivered in a future release

Release Number		1.0	1.1	2.0	2.1	2.2	3.0	3.1	4.0	5.0	5.1	6.0 Beta	6.0 Beta Update 1
Delivery Date		7/30/99	9/2/99	9/24/99	10/25/99	11/18/99	12/17/99	1/21/00	3/17/00	5/12/00	6/22/00	7/28/00	9/14/00
Configuration Item	CI No.												
Logging (Server)	2.4	1.0	1.0	2.0	2.0	2.0	3.0	1.0	1.0	1.1	1.1	2.0	2.0
Scenario (Client) <sup>2</sup>	2.5								1.0	1.1	1.1	2.0	2.0
Scenario (Server) <sup>2</sup>	2.6								1.0	1.1	1.1	2.0	2.0
Serial Input (Client) <sup>2</sup>	2.7								1.0	1.1	1.1	2.0	2.0
Serial Input (Server) <sup>2</sup>	2.8								1.0	1.1	1.1	2.0	2.0
Serial Output (Client) <sup>2</sup>	2.9								1.0	1.1	1.1	2.0	2.0
Serial Output (Server) <sup>2</sup>	3.0								1.0	1.1	1.1	2.0	2.0
TxFile (Client) <sup>3</sup>	3.1												
TxFile (Server) <sup>3</sup>	3.2												

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<sup>2</sup> New in Release 4.0

<sup>3</sup> New in Release 6.0

## Release History Summary Matrix, Continued

**System:**        **MPS/Aqua**

<b>Release Number</b>		6.0	6.1										
<b>Delivery Date</b>		9/28/00	11/17/00										
<b>Configuration Item</b>	<b>CI No.</b>												
Core (Client)	1.1	2.0	2.0										
Core (Server)	1.2	2.0	2.0										
SC-PM1 (Client)	1.3	6.0	6.0										
SC-PM1 (Server)	1.4	6.0	6.0										
GS (Client)	1.5	6.0	6.0										
GS (Server)	1.6	6.0	6.0										
IP Input (Client)	1.7	2.0	2.0										
IP Input (Server)	1.8	2.0	2.0										
IP Output (Client)	1.9	2.0	2.0										
IP Output (Server)	2.0	2.0	2.0										
DQM (Client) <sup>4</sup>	2.1												
DQM (Server) <sup>4</sup>	2.2												
Logging (Client)	2.3	2.0	2.0										

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<sup>4</sup> To be delivered in a future release

<b>Release Number</b>		6.0	6.1										
<b>Delivery Date</b>		9/28/00	11/17/00										
<b>Configuration Item</b>	<b>CI No.</b>												
Logging (Server)	2.4	2.0	2.0										
Scenario (Client) <sup>5</sup>	2.5	2.0	2.0										
Scenario (Server) <sup>5</sup>	2.6	2.0	2.0										
Serial Input (Client) <sup>5</sup>	2.7	2.0	2.0										
Serial Input (Server) <sup>5</sup>	2.8	2.0	2.0										
Serial Output (Client) <sup>5</sup>	2.9	2.0	2.0										
Serial Output (Server) <sup>5</sup>	3.0	2.0	2.0										
TxFile (Client) <sup>6</sup>	3.1	2.0	2.0										
TxFile (Server) <sup>6</sup>	3.2	2.0	2.0										

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<sup>5</sup> New in Release 4.0

<sup>6</sup> New in Release 6.0



### **Attachment C — Mission Systems Configuration Management Form**

This attachment contains the completed Mission Systems Configuration Management (MSCM) form for the delivery of MPS/PM1 Release 6.1.

### Mission Systems Configuration Management Form

<u>1. ORIGINATOR</u> Estelle Noone	<u>2. ORGANIZATION</u> CSC	<u>3. PHONE</u> 301-805-3653	<u>4. E-MAIL ADDRESS</u> enoone@csc.com
<u>5. ELEMENT</u> ETS (MPS/PM1)		<u>6. INSTALLATION PRIORITY</u> Routine	<u>7. TRACKING NUMBER</u> (Assigned by CM Office)
<u>8. SOURCE CHANGE REQUEST(S):</u> ETS delivery of MPS for EOS PM-1 (MPS/PM1)		<u>9. APPROVALS</u> <div style="display: flex; justify-content: space-between;"> <div>Element Manager</div> <div>_____</div> <div>____/____/____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Flight Ops Director</div> <div>_____</div> <div>____/____/____</div> </div> <div style="display: flex; justify-content: space-between;"> <div>Operations Manager</div> <div>_____</div> <div>____/____/____</div> </div>	
<u>10. DELIVERED SYSTEM</u> (Check all that apply)			
	Name	Version	Media Identification
<input type="checkbox"/> Hardware	_____	_____	_____
<input checked="" type="checkbox"/> Software	MPS/PM1	R6.1	CD-ROM
<input type="checkbox"/> Database	_____	_____	_____
<input checked="" type="checkbox"/> Documentation:			
	MPS/PM1 delivery package	N/A	via email
	_____	_____	_____
	_____	_____	_____
<input type="checkbox"/> Other	_____	_____	_____
<u>11. CHANGE DESCRIPTION</u> Release 6.1 of MPS/PM-1 (MPS/PM-1) _____ _____ _____			
<u>12. ATTACHMENT(S):</u> Check if YES <input checked="" type="checkbox"/> Description: MPS/PM1 Release 6.1 delivery package (cover letter with attachments) dated 11/17/00 _____ _____			
<u>13. CM OFFICE USE</u>			
	Location (Bldg/Room)	Slot location(s)	
Hardware	____/____	_____	
Media	____/____	_____	
Documentation	____/____	_____	
Installation date	____/____/____	CM Office Signature _____	

Form MSCM (970327)